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EXAMINER	
TURNER, SHARON L	

ART UNIT	PAPER NUMBER
1649	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/441,140	SOLOMON, BEKA	
	Examiner	Art Unit	
	Sharon L. Turner	1649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *155,161,167,173-177,183-186,192-195 and 201-204* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *155,161,167,173-177,183-186,192-195 and 201-204* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. The Examiner and/or Art Unit of U.S. Patent application SN 09/441,140 has changed. In order to expedite the correlation of papers with the application please direct all future correspondence to Examiner Turner, Technology Center 1600, Art Unit 1649.

2. The amendment filed 1-17-06 has been entered into the record and has been fully considered.

3. The text of Title 35 of the U.S. Code not reiterated herein can be found in the previous office action.

4. As a result of Applicant's amendment, all rejections not reiterated herein are withdrawn by the Examiner.

5. Amended claims 155, 161, 167, 173-177, 183-186, 192-195 and 201-204 are pending.

6. The Examiner has reviewed the file history and notes that it appears that p. 2 of the 1449 submitted 8-28-02 is missing. Applicant's are requested to review the file history for completeness. If a signed copy of this p. 2 is in Applicant's possession they are requested to submit a copy to the office for completion. If the signed copy was not transmitted to Applicant's they are requested to submit p. 2 of the 1449 for consideration by the Examiner.

Reissue Applications

7. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No.

09441140 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

8. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following: All amendments made after 8-25-04 are not supported by a proper supplemental reissue declaration under 37 CFR 1.175(b) stating that "every error being corrected in this reissue application that is not covered by a previously filed reissue declaration arose without deceptive intent." (see MPEP § 1414.01). It is noted that the claims have been significantly amended from the claims as presented with the previous oath. The claims are amended as of record from the previous submissions. A supplemental reissue declaration in compliance with both 37 CFR 1.175(b) and 37 CFR 1.175(c).

Claims 155, 161, 167, 173-177, 183-186, 192-195 and 201-204 are rejected as being based upon a defective reissue oath under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the oath is set forth in the discussion above in this Office action.

Rejections Maintained and Necessitated by Amendment

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 155, 161, 167, 173-177, 183-186, 192-195 and 201-204 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

New base claims 174, 183, 192 and 201 recite alternative elements of the claim where the alternatives are indefinite. In particular, the claims recite formulations comprising a carrier and a monoclonal antibody or antigen binding fragment thereof and addition provide the alternative wherein the monoclonal may be a human monoclonal or a genetically engineered monoclonal. In particular, it is unclear if Applicants intention is to recite elements A and B together and C separately, or alternatively elements A and B together and elements A and C together. The claims continue with stipulations as to "said monoclonal and said fragment. However, it is unclear if these limitations within the wherein clause apply to both human and genetically engineered monoclonals or only one of the monoclonal populations as there is duplicative antecedent basis. Further, it is unclear whether the antigen binding fragment is intended to refer to both the human and genetically engineered monoclonals or only to one, see for example MPEP 2173.05. The scope of the claim with respect to its required and alternative elements should be clarified.

Claims 155, 161, 167 and 173 are further indefinite with respect to the recitation "wherein said beta-amyloid is human beta amyloid" because the base claims refer to both (i) residues 1-28 of beta amyloid and to (ii) either the inhibition of aggregation of beta amyloid or the maintenance of solubility of beta amyloid. The art recognizes different experimental properties of different forms of beta amyloid with respect to specific amino acid sequence, and in full-length in comparison to fragments. Accordingly it is not clear to which amino acid sequences/residues and what properties the claims are reciting/limiting. For example, the claim may be referring to an antibody or fragment that recognizes human beta amyloid residues 1-28 and provides the function of inhibiting aggregation of human beta amyloid, or alternatively the function may only require inhibition of aggregation of any beta amyloid or vice versa. There are multiple interpretations to the structural and functional constraints of the antibodies encompassed. Thus, clarity is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 155, 161, 167, 173-174, 176, 183, 185, 192, 194, 201, 203 are rejected under 35 U.S.C. 102(a) as being anticipated by Bickel *et al.* (*Bioconiugate* 5(2): 119-

125, March/April 1994) as further evidenced by Solomon, Expert Opin Biol Ther, 2(8):907-917, 2002.

The claims as newly amended encompass therapeutic compositions comprising pharmaceutically acceptable carrier with various antibodies or antigen binding fragments of antibodies noted to provide for the properties of either inhibiting aggregation or maintaining solubility of beta amyloid as recited in the claims, see claims.

Applicants argue in the 1-17-06 response that the Bickel antibody AMY33 is a mouse monoclonal as evidenced in Stern 1989 and accordingly does not anticipate. This argument has been fully considered but is not persuasive. While Stern does evidence that Bickel's AMY33 is a mouse monoclonal this antibody does apply as a genetically engineered monoclonal antibody and it also applies as comprising an antigen binding fragment thereof. As substantially amended the claims are now clearly on point that the monoclonal of the dependent claims applies as a genetically engineered antibody not limited for example to antibodies of chimeric or humanized form. As in the claims, the AMY33 antibody was made to and recognizes human beta amyloid residues 1-28 and as such is an antibody that recognizes and may be obtained using (product by process limitation) residues 1-28. Accordingly, the antibody meets the structural limitations of the claims. Further as to the inclusion of a pharmaceutically acceptable carrier the antibody is noted in TBS, p. 121, column 1, paragraph 1, for example. It is noted that the reference is silent to the antibodies properties in mediating the functional requirements of (ii), either inhbiting aggregation or maintaining solubility.

The PTO does not have sufficient ability to test the antibodies for these inherent properties. Nevertheless, the record does shows that Solomon evidences anti-aggregating or solubility promoting properties to the subject antibodies. Accordingly the burden fairly falls to applicant to evidence otherwise.

13. Claims 155, 161, 167, 173-174, 176, 183, 185, 192, 194, 201, 203 are rejected under 35 U.S.C. 102(b) as being anticipated by Stern *et al. Am J Pathol.*, May 1989, 134(5):973-8 as further evidenced by Solomon, Expert Opin Biol Ther, 2(8):907-917, 2002.

The claims as newly amended encompass therapeutic compositions comprising pharmaceutically acceptable carrier with various antibodies or antigen binding fragments of antibodies noted to provide for the properties of either inhibiting aggregation or maintaining solubility of beta amyloid as recited in the claims.

Stern was not argued separately in the 1-17-06 response, but the comments in response to Bickel are on point that AMY33 is a mouse monoclonal as evidenced in Stern 1989 and accordingly Applicants assert that the reference does not anticipate. This argument has been fully considered but is not persuasive. While Stern does evidence that AMY33 is a mouse monoclonal, this antibody does apply as a genetically engineered monoclonal antibody and as comprising an antigen binding fragment thereof. Further, Stern is not only on point to AMY33, but is on point to all monoclonals as noted in Table 1 of the reference. All of these antibodies were obtained via immunization with Abeta 1-28 peptide and were shown via ELISA to react specifically to the human beta amyloid BAPP 1-28 epitope. Accordingly these

antibodies of Stern also apply as genetically engineered monoclonals or as comprising antigen binding fragments thereof obtained by or reactive to epitiope 1-28. As in the claims, the antibodies were made to and recognize human beta amyloid residues 1-28. Accordingly, the antibodies meet the structural limitations of the claims. Stern *et al.* teaches solutions of the monoclonals in standard ELISA buffer and in immunohistochemistry buffer. As substantially amended the claims are now clearly on point that the monoclonal of the dependent claims applies as a genetically engineered antibody not limited for example to antibodies of chimeric or humanized form. Accordingly, these antibodies meet the structural limitations of the claims. The claims are silent to the functional limitations of (ii) either inhibiting aggregation or maintaining solubility. The PTO does not have sufficient ability to test the antibodies for these inherent properties. Nevertheless, the record shows that Solomon evidences anti-aggregating or soluble promoting properties to the subject antibodies. Accordingly the burden fairly falls to applicant to evidence otherwise.

14. Claims 155, 161, 167, 173-176, 183-185, 192-194, 201-203 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaskin *et al.*, J Exp Med, 1 April 1993, 177(4):1181-1186 as evidenced by Solomon, Expert Opin Biol Ther, 2(8):907-917.

Gaskin et al. teach four human monoclonal antibodies, which bind epitope 1-28 of human Aβ and would therefore also be suitably obtained thereby (a product by process limitation). Thus the antibodies of Gaskin meeting the structural limitations of the claims (Figure 1; p. 1182). The claims recite functional properties assigned to the claimed antibodies including "inhibits β-amyloid aggregation" and/or "maintains soluble

β-amyloid solubility." Although Gaskin *et al.* is silent on said properties, a compound and all of its properties are inseparable; thus, the antibodies are taken to be the same (*In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963)).

Furthermore, the Examiner notes that the antibodies raised against the first 28 amino acids of β-amyloid inherently have "chaperone" or anti-aggregating properties as evidenced by Solomon, *Expert Opin. Biol. Ther.*, December 2002, 2(8):907-917. Solomon teaches that antibodies targeting the N-terminus of Aβ (residues 1-28) have anti-aggregating properties including solubilization of existing aggregates and inhibition of aggregation (See p. 909). There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of the invention, but only that the subject matter is in fact inherent in the prior art reference [See *Schering v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003)]. The standard antibody solution for performing immuocytochemistry (including ELISA) is PBS which is 1 MM KH2PO4, 3 mM Na2HPO4 8 7H2), pH 7.4, and 155 mM NaCl (see GIBCO Media Formulations from Invitrogen website; retrieved 9/03/2004). Therefore, PBS the standard ELISA solution is almost identical to physiological salt molarity and pH (See Moffett et al. (1993) Human Physiology, 2nd ed., inside cover). Gaskin *et al.* teach a solution of human monoclonal antibodies in standard ELISA buffer.

Applicant's traverse the rejection as set forth in the response of 1-17-06 at pp. 17-21. In brief, Applicant's argue that the Examiner has not met the burden to establish under inherency that the antibodies and compositions of Gaskin anticipate the rejected

claims. Applicant's point to MPEP 2112 for standards of inherency and argue that the Examiner does not establish that the Gaskin antibodies must necessarily "recognize an epitope within residues 1-28 of human beta-amyloid" or "be obtainable using residues 1-28 of human Beta-amyloid," and that such antibodies "maintain the solubility of soluble beta amyloid" or "inhibit aggregation of beta-amyloid," as recited in the claims. Applicants argue that Gaskin at p. 1184 suggests that the epitiope is not within residues 1-28 and is not obtainable using residues 1-28. Further, Applicants suggest that since the antibodies were found in Alzheimer's patients, the reference suggests that these antibodies do not inhibit aggregation or maintain the solubility of soluble beta-amyloid. Applicants further argue that the reference suggests the antibodies are pathogenic, not therapeutic, noting the last paragraph of Gaskin, thus providing no motivation to make a pharmaceutical formulation. Applicant's submit that the claims as newly amended now give weight to the recitation of "a pharmaceutical formulation" and thus distinguish structurally from the prior art as it must be packaged therefore.

Applicants arguments filed 1-17-06 have been fully considered but are not persuasive. Gaskin does evidence that the antibodies react to Abeta 1-28 and therefore no other proof is needed by the Examiner. That an antibody is reactive to the antigenic epitope to which it binds is a long held art accepted principle and further the recitation that the antibody "may be obtained by" is a product by process limitation not garnering weight where the prior art antibody is already evidenced to provide the recited structural constraints of binding Abeta 1-28. As substantially amended the claims are now clearly on point that the monoclonal of the dependent claims applies as a genetically

engineered antibody not limited for example to antibodies of chimeric or humanized form. Accordingly, the Examiners burden has clearly been met via the rejection of record. The fact that the antibody may cross react with other portions or that other portions of a peptide molecule may contribute to epitope stability is immaterial where the antibody is already evidence to bind the requisite epitope. Better binding is not the subject of the claims and mere evidence that certain residues may stabilize such a binding interaction is not a teaching that negates anticipation where binding is evidenced. Further, as to any intended use, such is not limiting. Also as to motivation, no motivation is required where the reference is anticipatory as herein. The fact that the antibodies are provided in a pharmaceutically acceptable carrier alone is sufficient as disclosed herein. Accordingly, the reference teachings anticipate the claimed invention.

15. Claims 155, 161, 167, 173-174, 176, 183, 185, 192, 194, 201, 203 are rejected under 35 U.S.C. 102(a) as being anticipated by Walker *et al.*, *Journal of Neuropathology and Experimental Neurology*, July 1994, 53(4):377-383 as evidenced by Solomon Expert Opin Biol Ther, 2(8):907-917, 2002.

Walker *et al.* teach a monoclonal antibody 10D5, a murine IgG1, kappa light chain (whole IgG and/or Fab fragments) specific for residues 1-16 of Aβ. The reference teaches a pharmaceutical composition of 10D5 in sterile solution, which is administered to rhesus and squirrel monkeys, thus meeting the limitations of the claims with respect to recognizing an epitope within residues 1-28. The reference is not on point to the antibody being obtained by such immunization but such is a product by process limitation not garnering weight against the property already evidenced.

A preamble is not a limitation when the claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim (See MPEP §2112[R-2]). The claims recite functional properties assigned to the claimed antibody including "inhibits β-amyloid aggregation" and/or "maintains soluble β-amyloid solubility." However, the 10D5 antibody taught by Walker *et al.* is silent on said properties, a compound and all of its properties are inseparable. The antibodies are taken to be the same (*In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963)). Furthermore, the Examiner notes that the antibodies raised against the first 28 amino acids of β-amyloid inherently have "chaperone" or anti-aggregating properties as evidenced by Solomon, *Expert Opin. Biol. Ther.*, December 2002, 2(8):907-917. Solomon teaches that antibodies targeting the N-terminus of Aβ (residues 1-28) have anti-aggregating properties including solubilization of existing aggregates and inhibition of aggregation (See p. 909). There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of the invention, but only that the subject matter is in fact inherent in the prior art reference [See *Schering v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003)]. Walker *et al.* teach a solution of the monoclonal antibodies in sterile saline solution. Accordingly, the reference teachings anticipate the claimed invention.

Applicants argue in the 1-17-06 response that the rejection is obviated as the claims are directed to human antibodies and to genetically engineered antibodies and thus the reference fails to anticipate.

These arguments have been fully considered but are not persuasive. As amended the claims are directed to therapeutic compositions comprising pharmaceutically acceptable carrier with various antibodies or antigen binding fragments of antibodies noted to be human or genetically engineered, and to provide for the properties of either inhibiting aggregation or maintaining solubility of beta amyloid as recited in the claims, see claims. It appears that Applicant's opinion is that monoclonals are not genetically engineered. However the artisan recognizes that the process of making monoclonals is the result of genetic engineering. As substantially amended the claims are now clearly on point that the monoclonal of the dependent claims applies as a genetically engineered antibody not limited for example to antibodies of chimeric or humanized form. It is not clear how the two may be separated and nonetheless the mouse monoclonal comprises the antigen binding fragment. Therefore anticipation is provided to the monoclonals that are genetically engineered and not limited to human.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 155, 161, 167, 173-177, 183-186, 192-195 and 201-204 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Becker *et al.*, European patent application, EP 0613007 A2, filed 2/18/94 in view of Bickel *et al., Bioconiugate* 5(2): 119-125, March/April 1994 or Gaskin *et al.*, *J Exp Med*, 1 April 1993, 177(4):1181-1186.

Becker *et al.* teach pharmaceutical formulations containing antibodies having specificity for β-amyloid peptide. The reference teaches the peptides contain just the first 40 amino acids of the β-amyloid peptide (β1-40). The reference teaches antibodies and fragments of antibodies, including chimeric, humanized, veneered, resurfaced or CDR-grafted antibodies, single-chain antibodies as well as human monoclonal antibodies and genetically engineered monoclonal antibodies (p. 4 columns 5-6). The antibodies disclosed are presumed to recognize an epitope within residues 1-28 of beta amyloid or to be obtainable using residues 1-28 of beta amyloid as an immunogen.

As noted above, a preamble is not a limitation when the claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim (See MPEP §2112[R-2]). The claims recite functional properties assigned to the claimed antibody including "inhibits β-amyloid aggregation"

and/or "maintains soluble β-amyloid solubility;" however, the antibodies taught by Becker *et al.* fall within the genus of antibodies as instantly claimed (See Frenkel et al., Journal of Neuroimmunology, 1998, 88:85-90). Although Becker *et al.* is silent on said properties, a compound and all of its properties are inseparable; thus, the antibodies are taken to be the same antibodies (*In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963)). Therefore, by adding the "unit dosage" or "pharmaceutical composition" limitation, Applicant is providing an intended use for an existing product.

Furthermore, it would have been obvious to use the antibodies of Bickel and Gaskin to produce pharmaceutical formulations wherein the antibody is genetically engineered or a single chain antibody as taught by Becker *et al.* and well-established in the art.

Applicants argue in the 1-17-06 response that Becker is not on point to the Beta amyloid 1-28 epitope and that the burden of inherency falls to the Examiner. Further Applicants argue that Becker is mere suggestion to therapeutic use and that motivation is not provided to use the antibodies of Bickel or Gaskin and that no combination is suggested. Applicants further allude that the combined references may not be enabling with reference to In re Hoeksema.

These arguments have been fully considered but are not persuasive. That the Bickel and Gaskin antibodies are of the correct epitope specificity is established above. While the references are silent to particular functional recitations with respect to such antibodies is addressed above noting that the a product and its properties are inseparable and further a basis within the literature for a showing a scientific basis for

the compounds as possessing such characteristics. Reliance on combination is merely noted for more specific genetic modification of the art known antibodies. This is supplied via Becker noting specific human antibodies as well as genetic modification of antibodies to beta amyloid peptide to include such antibodies in chimeric or humanized form or for single chain modification as suggested in Becker for in vivo use to decrease hyperimmungenicity in vivo for treatment of Alzheimer's disease in patients and for detection of amyloid plaques amongs other such uses. As substantially amended the claims are now clearly on point that the monoclonal of the dependent claims applies as a genetically engineered antibody not limited for example to antibodies of chimeric or humanized form. That the modification is suggested by Becker is clear, and accordingly motivation is provided where the advantages of such are recognized in providing reduced hyperimmunogenicity, antigenic specificity and utility for detection and treatment. Accordingly, the cumulative reference teachings render obvious.

Conclusion

18. No claims are allowed.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon L. Turner, Ph.D. whose telephone number is (571) 272-0894. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached at (571) 272-0867.

Sharon L. Turner, Ph.D.
May 31, 2006

SHARON TURNER, PH.D.
PRIMARY EXAMINER
5-31-06